

# THE BASICS OF TIMELAPSE



# Chapters

Hello there	3
About the author	4
Timelapse - In a Nutshell	5
1. Gear checklist	7
2. How to shoot a basic timelapse (static exposure)	8
2. How to shoot a holy grail (sunset or sunrise) timelapse	11
3. Post Production: Offloading and Editing Your Photos	12
4. Post Production: Creating Video Files	14
4.1. Photoshop	14
4.2. Free software	16
4.3. DaVinci Resolve	16
5. Additional Resources	20



## Hello there

Thank you for downloading this e-book.

You'll be on your way with timelapse photography in no time.

It took me **years and years** of trial and error, fine tuning and adjusting my shooting and processing workflows to come up with the best, most efficient way to shoot and edit the highest possible quality timelapse footage.

This e-book covers the basics, if you're interested in learning more about advanced timelapse shooting and editing you can check out **[The Ultimate Timelapse Course](#)**, or if you'd like the e-book version you can check out [The Ultimate Timelapse Guide](#).

## About the author

Just in case you don't know me, here's a bit of backstory. I'm aware this page is like one of those annoying recipe blog pages where you have to scroll through the author's life story before getting to the recipe, so feel free to skip it.

My name is Matthew Vandeputte. People know me online as [@matjoez](#). A lot of people seem to think Mat Joez is my name, which I can assure you it is not.

I was born and raised in Antwerp, Belgium. I graduated from the RITS school of arts in Brussels as a film editor in 2012. In 2014 the Australian department of immigration granted me a Distinguished Talent Permanent Residency visa for my work as a hyperlapse photographer (hyperlapse is an advanced form of timelapse).

I have been working as a freelance timelapse and hyperlapse photographer all over the globe for the last 10 years. I've produced timelapse content for brands such as Google, Samsung, Canon, Lumix, Microsoft, Ford and more. I have created audiovisual assets for tourism boards such as Dubai, the Philippines, Vanuatu, Australia, the city of Sydney and many more.

In 2019 my partner moved to London, so that's where I've been based out of for the last few years.

Throughout my career I have shared hundreds of videos on [my youtube channel](#), which is all about timelapse, travel and tutorials. I truly am passionate about educating others about this little niche in the wonderful world of photography.

I'm excited to count you as part of the thousands of people who have learned a thing or two about timelapse photography through my educational content.



## **Timelapse** - *In a Nutshell*

Traditionally, timelapses are created by shooting a large series of photographs at a fixed interval over an extended period of time. Afterwards - in what we call post production - this sequence of photos gets color graded, edited and rendered into a single video file.

The benefits of shooting timelapse sequences as a series of photos (as opposed to recording video and speeding it up) are quite substantial: more efficient battery usage, less data to process and store, bigger resolutions to work with, more room to fix errors in post production due to an increased available dynamic range etc.



# 1. Gear checklist

Feel free to *print this page* and put it in your camera bag.

- Camera
- Lens
- Battery
- Memory card
- Remote / intervalometer
- Tripod + tripod plate
- Lens cloth or cleaning kit

I have no doubt this little checklist will save you from a headache at some point in the future.

I've been in this timelapse game for quite a few years now and I still use a gear checklist on commercial productions.

Obviously there are more items you can pack in your bag (ND filters, polarisers, motion control gear etc) however these are the absolutely crucial items, hence why they made the gear checklist.



## 2. How to shoot a basic timelapse (*static exposure*)

Static exposure meaning the light doesn't change, it remains the same throughout the sequence. A *changing* exposure would be a sunrise or sunset sequence.

Here's how to set up a basic timelapse sequence:

1. Mount your camera on your tripod and make sure the entire setup is sturdy. Make sure all tripod legs are locked and properly supported. Some sandy surfaces will cause your setup to sink down ever so slowly.
2. Turn on your camera and switch it to Manual (M) mode. Make sure you are shooting RAW photos.

3. Dial in the appropriate exposure by adjusting your **shutter speed, aperture and iso values**. Make sure your iso and white balance aren't set to auto.
4. The reason everything is on manual and nothing is left on auto is because *you* - the camera operator - know best. Most cameras aren't built with timelapse photography in mind. The camera might choose the perfect settings for a single photo but then the light changes ever so slightly and you end up with a different exposure on the next photo. This results in visually distracting flicker, one of the most common beginner mistakes in timelapse photography. I talk more about this flickering and how to prevent and solve it in this video [here](#).
5. Frame up your composition, making sure that your camera is level. If you have a zoom lens, once you're happy with your composition, zoom out just a tiny bit. This slightly wider framing might come in handy in case you need to stabilise your sequence later because of bumps or wobbles.
6. Focus your lens and disable autofocus. If you leave autofocus on (and you don't have 'back button focus' enabled on your camera) your remote will trigger the lens to focus for every frame it shoots. On some frames it will fail to focus properly and you end up with a very jittery looking sequence that is not fixable in post.
7. Disable lens stabilisation if you have it. When mounted on a tripod the stabilising mechanism will actively 'hunt' for motion and create movement in between photos. This is fixable in post by applying digital stabilisation but why fix things in post when you can *get it right from the start?*

8. Grab your remote or intervalometer and connect it to your camera. Select your desired interval (the amount of seconds between triggering photos).

You can use the following intervals as a *guideline*, however *feel free* to adapt and experiment:

- People or foot traffic: 1 second
- Vehicular traffic: 1 to 2 seconds
- Clouds, landscapes and cityscapes: 3 to 5 seconds
- Sunset or sunrise: 6 seconds minimum

Double check all your settings then hit start on the remote, sit back and relax. This is a great time to read a book, listen to a podcast, take photos of your timelapse setup and location etc.

Let the sequence run for *at least* 300 photos (this will result in 12 seconds of video in a PAL environment such as Europe, or 10 seconds of video in an NTSC environment like the USA).

## 2. How to shoot a holy grail (sunset or sunrise) timelapse

I must admit, using the words 'holy grail' to reflect a sunrise or sunset timelapse shot has always made me giggle. These words are a remnant from a time when shooting a timelapse of the sunset was incredibly challenging, due to the changing light caused by the setting sun.

Traditionally you had to manually adjust the camera's exposure settings as the sun was setting, making sure not to bump the camera setup or to change the settings the wrong way around. Afterwards you had to fix all these exposure changes as they would lead to jumps in brightness. This is why [LRTimelapse](#) was developed by the way, to help the post processing workflow for holy grail timelapse shots.

As time has moved on, luckily so has technology.

At the time of writing the majority of my holy grail shots are captured fully automatically in-camera using a built in 'exposure levelling' mode which gradually and minutely adjusts the camera's shutter speed and iso values. My Samsung phone has a built in timelapse mode called Night Lapse which does flawless day to night transitions. GoPro cameras have had great holy grail performance since 2015, etc.

It's never been easier to capture the holy grail, so should we still call it that? I don't think that's up to me to answer.

What I will do however is teach you the traditional way of shooting and editing holy grail shots.

As this is quite a hands-on process, which has a ton of different steps, I've made a dedicated video which covers the process from planning, to shooting, to editing.

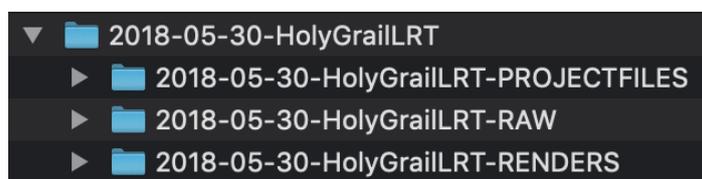
Please watch that video [here](#), or if you prefer to read it step-by-step you can read the entire process and workflow [here](#).

### 3. Post Production: *Offloading and Editing Your Photos*

Great, you have successfully captured a basic timelapse sequence! It's now time for the next important phase in creating timelapse videos: **post production**. This phase begins immediately after you're done shooting. We're not about to start editing just yet though. It is more important than you think to have a consistent and efficient workflow to offload and store your footage.

Before offloading the data from your memory cards I recommend you install the free app Post Haste on your computer and use my **basic timelapse template** (included when you purchase [The Ultimate Timelapse Course](#) or [available as a separate download](#)) to generate a **consistent folder structure**. I can't stress the importance of consistency and efficiency enough. When you revisit this footage or hard drive years later you'll be grateful for how easy it is to find the original project files and photographs.

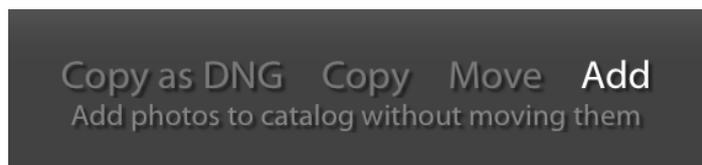
Here is an example of what your folder structure should look like:



Here's the next process in short: We'll offload the photos from the memory card on to a hard drive, import them into Lightroom and color grade them.

1. Offload the footage from your memory cards to an external hard drive in the generated *RAW folder*.

2. Open up *Adobe Lightroom* and import this RAW folder in a new Lightroom catalog using the 'Import > Add' method.



3. Once Lightroom is finished importing the data (you will see a progress bar on the top left), rename your sequences to reflect the content of the shot.

I like to work with the following 'date-location-shot' structure:

2021-12-15-LondonCityWide-RAW

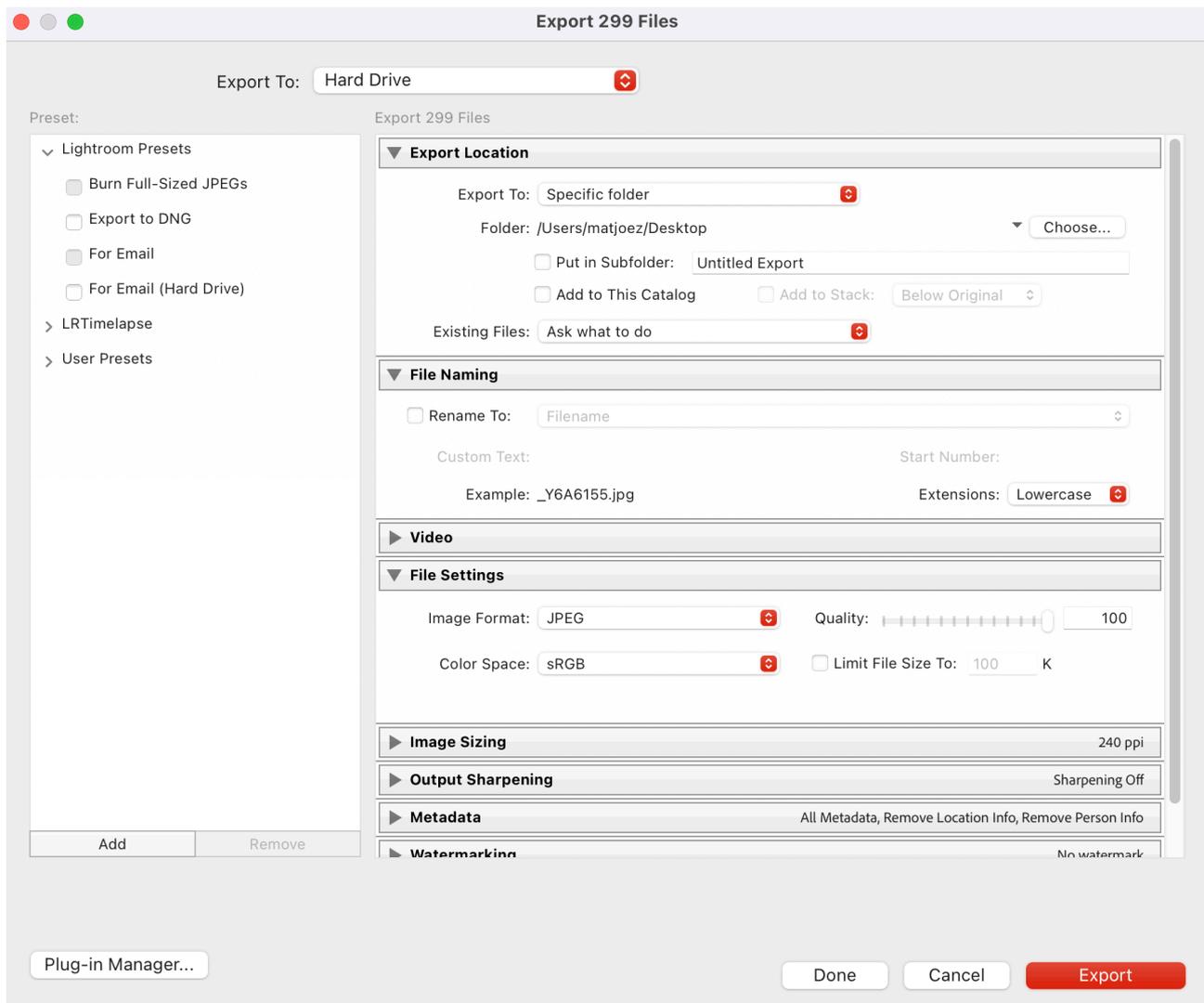
4. Select the sequence you would like to process and select the first photo. Go to the Develop module (or hit D on your keyboard). We will color grade one photo, then copy the settings on to the rest of the sequence.
5. Adjust the develop settings (exposure, contrast, white balance, vibrance and saturation) as required, then in the top menu click Settings > Copy Settings. Select which settings you want to copy (usually all of them), select the rest of the photos in the sequence and then click Settings > Paste Settings.
6. Once Lightroom is done pasting the settings, select all the photos in the sequence and 'Right click > Metadata > Save metadata to files'. This generates a small text based file that is saved alongside the RAW files containing all the new settings, which will be used to generate the video file later.

## 4. Post Production: *Creating Video Files*

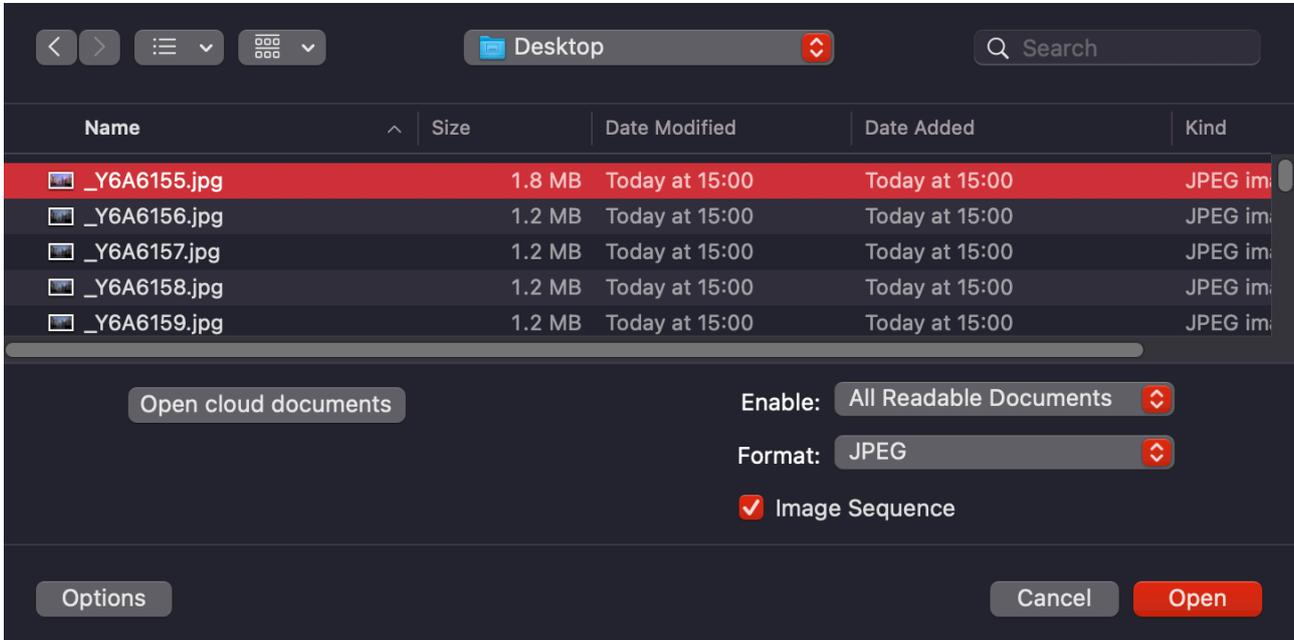
Now that we're done color grading the images we can move on to creating a video file from our photos. This can be done in several different ways, depending on which software you have and which one you prefer to use.

### 4.1. Photoshop

Yes, that's right, Photoshop can create video files. To create a video file you need to export your RAW photos to a series of JPEGs first. Select your sequence in Lightroom and go to File > Export... Use the following settings to create high resolution JPEG files.



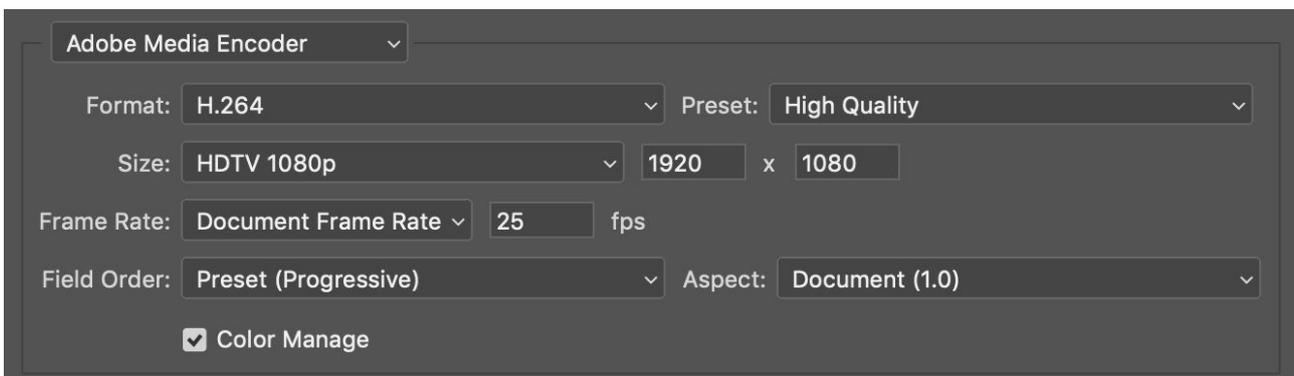
Once these photos are exported, open Photoshop and select 'File > Open'. Navigate to the correct folder and select the first photo of your desired image sequence. Make sure to enable the 'Image Sequence' box.



A dialogue will pop up asking you to set your desired frame rate. I use 25 fps but you can use whichever frame rate you prefer.

Go to 'File > Export > Render video'. Depending on your computer this can be a very time consuming process.

I recommend using the following settings to generate a basic video file:



## 4.2. Free software

There is a wide range of software available for rendering your timelapses. [LRTimelapse](#) allows you to use the software for free for sequences up to 400 photos in length. TLDFLite is a free standalone app for Mac which also turns sequences into video files, it even has a deflickering option. The paid version [TLDF](#) unlocks more features. Another option is to use [DaVinci Resolve](#), which is a fully fledged editing suite. It's got a slightly steeper learning curve, but it's very manageable if you take your time to learn.

## 4.3. DaVinci Resolve

[DaVinci Resolve](#) is very powerful video editing and color grading software.

It has a free version available for you to use with certain limitations in its performance and output. That being said, even this free version is very powerful.

As it wasn't necessarily designed to render timelapse sequences you need a little workaround to get going.

Firstly you need to install the free Adobe DNG converter app. You need this converter to turn your camera's RAW files into DNG files so that Resolve can actually read them, as it doesn't deal with the original RAW files properly.

Download the DNG converter it for Windows [here](#) and for Mac [here](#).

Turn your RAW files into DNG files:

- Open Adobe DNG converter, click the Select Folder button and find your timelapse sequence.
- Choose a destination folder and click Convert.
- Let this run until all the images are processed.

Depending on your computer's hardware specifications this might take a while.

**DNG Converter**




- 1 Select the images to convert**



Select Folder...
/Volumes/T5A/2021-01-04-Verdi...-24-CanWharf-Sunrise-TOP-RAW/

Include images contained within subfolders  
 Skip source image if destination image already exists
- 2 Select location to save converted images**



Save in New Location
v

Select Folder...
/Users/matjoez/Desktop/helloyou/

 Preserve subfolders
- 3 Select name for converted images**

Name example: MyDocument.dng

Document Name

+

v

+

v

+

v

Begin numbering:

File extension: .dng v
- 4 Preferences**

Compatibility: Camera Raw 12.4 and later

JPEG Preview: Medium Size

Embed fast load data

Don't use lossy compression

Preserve Pixel Count

Don't embed original

Change Preferences...

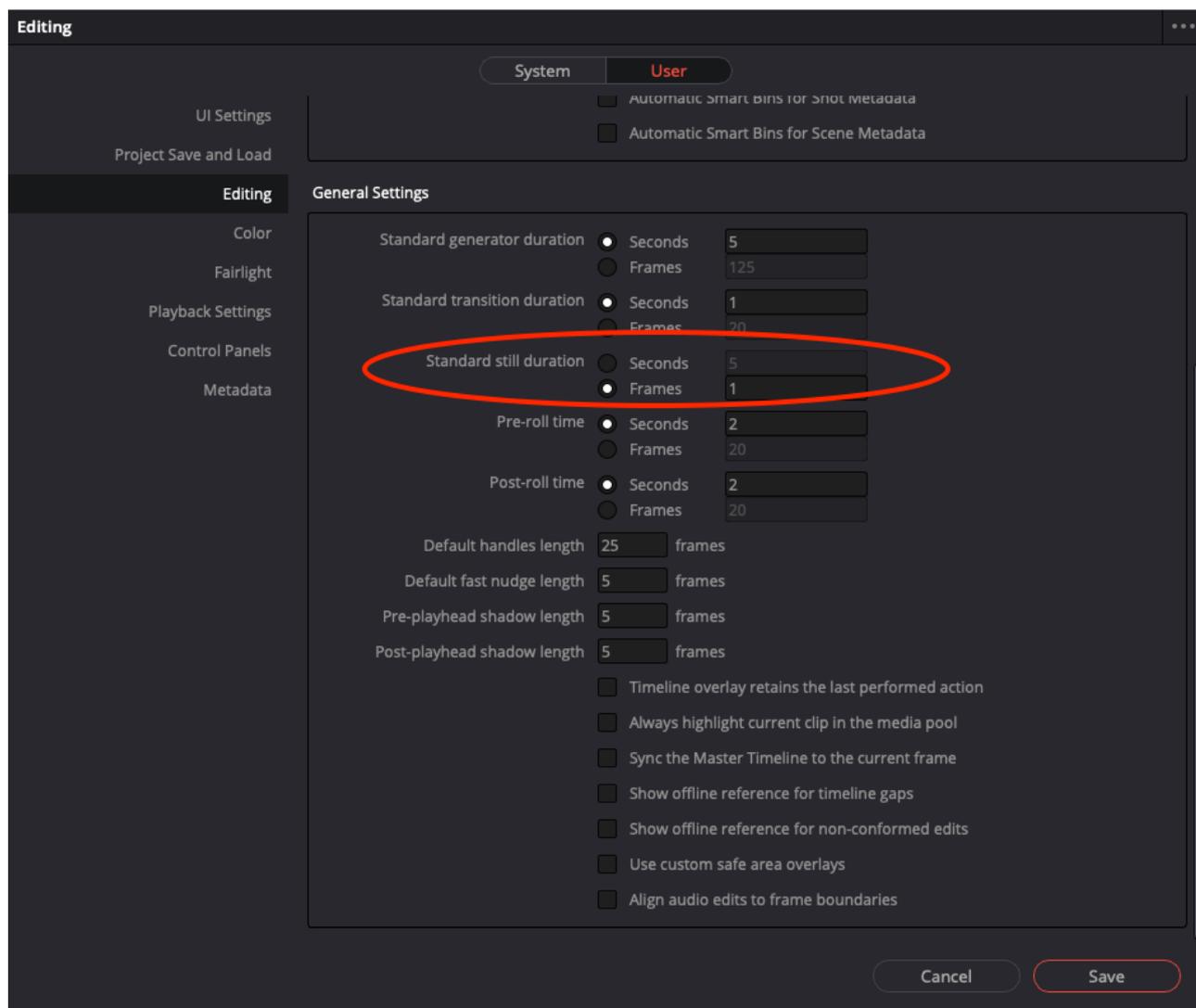
About DNG Converter...

Extract...

Quit

Convert

Now open DaVinci resolve and go to the software preferences. Under the User tab at the top navigate to the Editing tab on the left. Go to General Settings and set the 'Standard still duration' to 'Frames' and give it value 1.



You can now import your photo sequence into the software by dragging them into the Media Pool. The software will automatically recognise that this is an image sequence and import it as such. Now you can drag this sequence into a timeline and apply a color grade or deflickering filter to the sequence.

The Ultimate Timelapse Guide 42

Go to the Deliver tab at the bottom of the software and select your desired settings. My preference is always a ProRes 422 HQ codec with the native image's resolution for best quality results.

As this is a bit of a workaround this isn't the most efficient way to edit multiple sequences at once, the reason I feature it in the book is to give you the option to edit timelapses using both paid and free software.

Et voila, you've just shot, edited and exported a timelapse sequence!

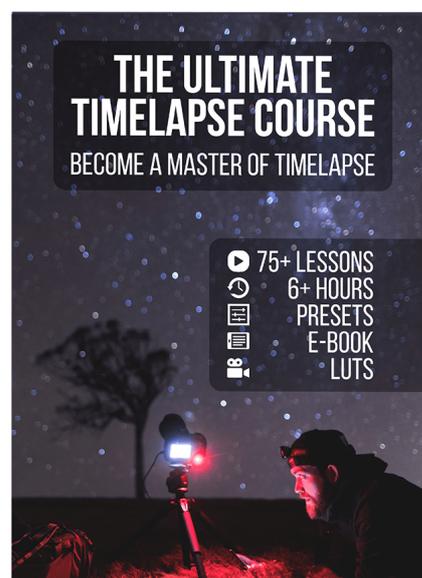
This is just the start, there are many more things to talk about when it comes to planning, shooting and editing world-class timelapses (and hyperlapses, and astrophotography timelapses, and so much more).

If you'd like to keep learning new things, and if you'd like to skip the trial and error bit of a new hobby, I can only recommend [The Ultimate Timelapse Course](#). It features over 80 exclusive video lessons, hundreds of RAW files and project files to download, as well as the whole course in e-book format, a members-only forum, my custom timelapse presets & LUT collection, an exclusive 10% LRTimelapse discount code and so much more.

On top of that, if you'd like to earn money by promoting The Ultimate Timelapse Course you can sign up for the affiliate program [here](#).

# BECOME A MASTER OF TIMELAPSE

[LEARN MORE](#)



## 5. Additional Resources

Below you will find links to software and extra resources on timelapse photography. Some of these are affiliate links, if you purchase anything through them I might make a small fee at no extra cost to you.

I highly recommend the free trial versions of all Adobe software, you can get up to 30 days of free usage without any limitations.

LRTimelapse has a free version that allows you to process photo sequences up to 400 frames in length. If you want to edit longer sequences but you're not making money from your timelapses I recommend getting the Private LRT software license. If you are shooting commercially then I advise you purchase the Pro LRT software license.

For **basic timelapse editing** I recommend getting [Lightroom](#) and [LRTimelapse](#). You can download Lightroom as part of a discounted [photo bundle](#) along with Photoshop.

For the most **advanced editing** options and complete control over all parameters I recommend [Lightroom](#), [LRTimelapse](#) and [After Effects](#). This is what I use on all of my productions.

A list of software I use:

- [Adobe Lightroom](#) to *organise and color grade* your sequences.
- [Adobe Photoshop](#) for *basic video export* functionality and *advanced photo editing*.
- [Adobe Photography](#) bundle (*Lightroom and Photoshop* together at a cheaper price).
- [Adobe After Effects](#) for *advanced effects editing and export* functionalities.
- [Adobe Premiere Elements](#) for *basic video editing* functionalities.
- [Adobe Premiere Pro](#) for *advanced video editing* functionalities.
- [All Adobe Creative Cloud apps](#) in a bundle.
- [LRTimelapse](#) for editing and rendering *basic and advanced / holy grail* sequences.

- [Post Haste](#) for a consistent folder structure (works with my custom timelapse template).
- I use [Epidemic Sound](#) to find beautiful and energetic production music to edit to (Sign up for free).
- I use [Lickd](#) to find commercial music that won't get copyright claimed on Youtube. This is a brand new service, well worth checking out.
- Check out [this list](#) of all the timelapse gear I use.

Relevant videos and blog posts:

- [LRTimelapse software explained.](#)
- [Complete Holy grail shooting and editing tutorial.](#)
- [How to make a time slice video with After Effects.](#)
- [Cheap vs expensive timelapse remotes.](#)